27 JUN 1979

MEMORANDUM FOR: Chief, Plans & Programs Staff, OL

VIA : Chief, Real Estate & Construction Division, OL

25X1 FROM : [redacted]
Chief, Headquarters Engineering Branch, RECD/OL

SUBJECT : Estimated Energy Savings Re Summer Boilers and Closing the Director's Garage

REF : Memo dtd 15 Jun '79 from C/HEB/RECD/OL to C/P&PS/OL, Subj: Annual Report on Energy Management

1. Regarding telephone conversations between [redacted] 25X1
25X1 [redacted] and a member of my staff, a requirement exists to quantify the possible energy savings and construction costs associated with the studies summarized in paragraphs 3(c) and 3(d) of the reference. Accordingly, the following is submitted:

a. Summer Boilers.

By installing small boilers in the Head quarters kitchen and in the Printing & Photography Building, a large 50,000 pound per hour boiler in the Powerplant could be secured. The savings would accrue from having a more efficiently sized boiler serving the load, and since the boilers would be near the load, the saving of the transmission line losses would be significant. Presently the June boiler consumption is running between 1.5 to 2 gallons per minute. The summer boilers would probably burn no more than the equivalent of 0.75 gallons per minute for a saving of from 0.75 to 1.25 gallons per minute equivalent. (As one of the boilers would burn gas, an equivalent in fuel oil is used for

OL 9 2545

SUBJECT: Estimated Energy Savings Re Summer Boilers and Closing the Director's Garage

this comparison). The saving in fuel for the summer months of July and August would therefore be between 22,320 gallons and 37,200 gallons equivalent of fuel oil rated at 102,000 BTU's per gallon. The construction cost is guesstimated to be in the $110,000 to $125,000 range.

b. Close the Director's Garage

The Director's garage exhausts air on a 24-hour per day basis to preclude the accumulation of gasoline and exhaust fumes. During the winter, cold air is brought in from the outside, heated to prevent the freezing of utility pipes and exhausted. The fuel used to heat this exhausted air is estimated to be between 28,750 gallons and 57,500 gallons per winter. Abandoning this space would produce a similar fuel saving. Some construction would be involved as the driveway door would be changed from an open grill style to a solid style to prevent the influx of outside air. This construction cost is guesstimated to be between $6,000 and $9,000.

2. The above information has been assembled rather quickly and will become more refined as the studies are completed.

[redacted] 25X1

Memo dated 15 June 1979 from C/LSD/OL to C/P&PS/OL;
subject: Reduction of Energy Use (OL 9 10,061)

Paragraph 1.b.

36,000 miles @ 12 mpg = 3000 gal. (gasoline)

Paragraph 1.d.

4000 gallons = approximates 1600 gallon diesel fuel and 2400 gallon gasoline.

TOTAL MOTOR POOL VEHICLES (TVA)	
Sedans	52
Station Wagons	21
Vans/Carryalls	30
Trucks	10
Checker Limousines	3
Buses	10
TOTAL	126

NOTE: Total Agency Vehicles: 198

FLEET AVERAGE MILES PER GALLON	
Sedans, Station Wagons, Vans	12 mpg
Buses, Trucks, Limousines	6 mpg
Weighted Average	9 mpg

FY 1979 (1st half) FUEL USAGE	
Leaded Gasoline:	45,358 gal.
Unleaded Gasoline:	43,303 gal.
Diesel Fuel:	5,753 gal.
TOTAL	94,414 gal.

FY 1978 TOTAL FUEL USAGE

Leaded Gasoline:	75,711 gal.
Unleaded Gasoline:	104,909 gal.
Diesel Fuel:	11,068 gal.
TOTAL	191,688 gal.

FY 1978 TOTAL FUEL COSTS

Leaded Gasoline:	$45,001
Unleaded Gasoline:	67,513
Diesel Fuel:	5,355
TOTAL	$117,869

NOTE: Average price per gallon was 61.5 cents.

TOTAL FUEL USAGE, 1 Oct 1974 - 30 September 1975

Leaded/Unleaded Gasoline:	155,006 gal.
Diesel Fuel:	- 0 -
TOTAL	155,006 gal.

TOTAL FUEL COSTS, 1 October 1974 - 30 September 1975

Leaded/Unleaded Gasoline:	$55,583
Diesel Fuel	- 0 -
TOTAL	$55,583

NOTE: Average price per gallon was 33.8 cents.